### **NOTICE**

# U.S. Department of Transportation Federal Aviation Administration

N 8110.76

9/25/98

Initiated By: AIR-110

Cancellation Date: 9/25/99

#### **SUBJ: DER TO DESIGNATED INSPECTION REPRESENTATIVE NOTIFICATION PROCESS**

- 1. PURPOSE. This notice defines a process that defines type certification conformity inspection notification procedures between an applicant's Designated Engineering Representative (DER) and an applicant's designated inspection representative. The objective of this process is to reduce the lead time required to provide notification and scheduling of an impending conformity inspection. For the purpose of this notice, a designated inspection representative refers to a Designated Manufacturing Inspection Representative, Designated Airworthiness Representative, or an Organizational Designated Airworthiness Representative, located in the applicant's geographic area. This notice establishes eligibility criteria and characteristics of an acceptable process for use when all activities for a specific conformity inspection are to take place in the United States.
- **2. DISTRIBUTION.** This notice is being distributed to the branch level of Washington headquarters; to the branch level in the Aircraft Certification Directorates; to all Manufacturing Inspection Offices; to all Aircraft Certification Offices; to all Manufacturing Inspection District and Satellite Offices; to all Flight Standards District Offices; to the Aircraft Certification Branch at the FAA Academy; and to the Brussels Aircraft Certification Division.

#### 3. BACKGROUND.

**a.** During type certification (TC) programs, a conformity request generated by the applicant's DER is typically routed through the Aircraft Certification Office (ACO) for approval, to the manufacturing specialist (in some locations) for tracking and routing, to the Manufacturing Inspection District Office (MIDO) principal inspector (PI) for review, and finally to the designated inspection representative for accomplishment of the inspection. The return of a completed conformity request is usually processed in reverse through the same personnel before final closure. Several ACO's and MIDO's have developed, for certain applicants, more efficient procedures for issuing routine conformity requests. These streamlined procedures have had the desirable effect of expediting designated inspection representative notification of conformity inspections, and providing more efficient utilization of Federal Aviation Administration (FAA) personnel and designees.

Distribution: A-W (IR) -3; A-X (CD) -3;

A-FAC-0 (ALL); A-FFS-7 (STD); AEU-100; AFS-600 (3 copies); AMA 220 (25 copies)

AMA-220 (25 copies)

N 8110.76 9/25/98

**b.** The lessons learned from these agreements are now standardized into a process that can be used effectively by all offices and functions. Two key factors have been identified with which compliance is necessary for the process to be successful:

- (1) Up-front planning before and during the initial TC board meetings, necessary to achieve the most efficient process definition.
- (2) Criteria used for determining designee, ACO, and MIDO involvement in the conformity notification process.
- **c.** This notice uses the above factors to define an acceptable DER to designated inspection representative conformity notification process, available for qualified certification applicants. This notice is not intended to cancel, revoke, or modify existing agreements approved by the applicant's ACO and MIDO that meet the intent of this notice.
- **4. NOTIFICATION PROCESS ELIGIBILITY.** This process applies to applicants experienced in FAA type certification that have extensive experience at the designee positions. The process may be used when the applicable ACO and MIDO determine that the applicant and associated designees meet all of the following requirements to adequately schedule and perform the ACO and MIDO identified conformity tasks. In addition, use of this process requires adherence to the applicable conformity inspection requirements defined in Order 8110.4A, Type Certification Process.

#### 5. UP-FRONT TC BOARD CONFORMITY PLAN.

- **a.** The most important component of a successful conformity notification process is the up-front conformity requirements plan, which is usually part of the overall certification plan. The conformity plan allows both the applicant and the FAA to better coordinate conformity inspections. This plan will detail for the applicant and associated designees the areas of direct involvement for the ACO, manufacturing specialist, and MIDO, as well as those areas the applicant is recognized as being capable of performing direct notification of conformity requirements.
- **b.** As an outcome of the conformity plan, the applicant will know for which parts or tests the DER's can generate FAA Form 8120-10, Request For Conformity, without ACO review prior to accomplishment of the conformity inspection. Also defined will be those Form 8120-10's for which the ACO will need to review before the conformity inspection is performed. Additionally, the MIDO can determine which conformity inspections are eligible for direct DER to designated inspection representative notification.
- **c.** It is important for the success of the conformity notification process that the details of conformity delegation be addressed early in the certification program, ideally before the initial TC board meeting. The FAA project manager should notify the applicant at the earliest possible opportunity of the need for up-front planning and development of the conformity plan. This plan is to be completed in writing by the applicant and authorized by the applicable ACO and MIDO representatives before the first conformity request is issued. The applicant also should be aware that if the direct conformity notification process is not requested early in the program and up-front planning is not performed, this process is not applicable.

Page 2 Par 3

9/25/98 N 8110.76

**d.** The name of a DER coordinator (not necessarily a DER) is to be identified by the applicant during this stage of the certification program. The primary purposes of the DER coordinator are to ensure that scheduling of the designated inspection representatives is accomplished in an efficient manner and to serve as a focal point with the ACO. Depending on scheduling and locations of the conformity inspections, the DER coordinator may be able to identify the designated inspection representatives that will be receiving conformity requests. Based on criteria defined in paragraph 5f of this notice, the FAA will approve specific DER's and designated inspection representatives for the process.

- **e.** A matrix and schedule for conformity inspection requirements is to be generated and included as part of the applicant's overall certification plan. As a minimum, the matrix will list the proposed conformity activities, when each proposed activity is to take place (to the extent possible), and whether the activity will have ACO and/or MIDO direct involvement. The method for resolution of unsatisfactory conformity findings must also be authorized by the ACO in the conformity plan.
- **f.** The conformity plan shall identify the ACO and MIDO authorized communication flow. The level of designee involvement identified in the conformity plan is based primarily on the following conditions:
  - (1) The applicant's up-front planning with the ACO and MIDO.
  - (2) The designee's technical and regulatory expertise.
  - (3) Criticality of the part or component.
  - (4) The applicant's and designee's working history with the FAA.
  - (5) Common parts versus unique parts (or materials/processes).
  - (6) Certain training completion (e.g., training for designated inspection representatives).
  - (7) Confidence in the applicant's quality systems (e.g., production and prototype).
- **g.** The method for tracking all conformity requests and maintaining a master list will be defined by the ACO during conformity plan development. Any tracking performed by the applicant on behalf of the FAA will be controlled by the DER coordinator.
- **h.** Included in the conformity plan will be procedures for the applicant's designated inspection representative to perform conformity inspections in an area outside the managing MIDO's geographic area. A process for accomplishing this is described in paragraph 7 of this notice. Both the managing MIDO and designated inspection representative should ensure adequate communication with the geographic MIDO where the inspection is to be performed.
- **i.** In situations where the ACO or MIDO limits or denies applicant participation in the conformity notification process, the applicable office should provide sufficient information to the applicant explaining the reasons for limitation or denial. This information will be useful for the applicant to make necessary adjustments for potential future participation in the conformity notification process.
- **j.** In general, the criteria for determining ACO and MIDO involvement in requests for conformity inspections has been based on previous designee performance, applicant experience, designee expertise, part criticality, and the history of unsatisfactory/satisfactory findings, as referenced in FAA Order 8110.4A. These criteria remain valid for this process. In addition, existing designee supervision requirements remain in effect.

Par 5 Page 3

N 8110.76 9/25/98

#### 6. NOTIFICATION PROCEDURES.

**a.** If authorized in the conformity plan by the ACO and MIDO, the most direct flow for a conformity request is the DER generating and forwarding Form 8120-10 to the DER coordinator. This person then forwards the form to the designated inspection representative, with a copy of the form sent to the ACO. It is important that the designated inspection representative receives SUFFICIENT NOTIFICATION to plan for the inspection, and the DER coordinator should endeavor to make the conformity schedule available to all designated inspection representatives participating in the process. The conformity notification process is described on a flowchart located in appendix 1 of this notice. This flowchart is designed to be used in conjunction with the written procedures defined herein.

- **b.** Throughout the TC program, the applicant is required to accomplish conformity inspections as defined by the FAA. The ACO will determine whether the Form 8120-10 will require ACO review PRIOR to performing the conformity inspection (hereafter referred to as ACO pre-inspection review).
- **c.** If a DER received permission to generate a specific Form 8120-10 WITHOUT ACO pre-inspection review, the DER generates the form and forwards it to the DER coordinator. This person provides an information copy to the ACO and also notifies any other pertinent ACO's of the request. If a DER received permission to generate a specific Form 8120-10 WITH ACO pre-inspection review, the DER generates a DRAFT form and forwards it to the DER coordinator. This person sends the draft Form 8120-10 to the ACO for review prior to the inspection being performed. During the initial planning stage, the MIDO can request a copy of all DER generated Form 8120-10's, if desired. If agreed to by the ACO, the DER coordinator also will issue a tracking number for Form 8120-10.
- **d.** Once a specific Form 8120-10 is ready for distribution to an inspector, it must be determined if the MIDO has authorized the form to be sent directly to a designated inspection representative. If authorization was given, the DER coordinator or ACO, depending on who performed the final form review, sends it to the designated inspection representative, who in turn performs the conformity inspection. If authorization was not given for the form to be sent directly to a designated inspection representative, the DER coordinator or ACO, depending on who performed the final form review, sends it to the managing MIDO's manufacturing specialist or PI within two business days of approval. This person will forward Form 8120-10 to the appropriate designated inspection representative within four business days.
- **e.** If the conformity inspection is to be performed outside the managing MIDO's geographic area, Form 8120-10 is to be forwarded as described in paragraph 7 of this notice.
- **f.** Situations can arise during a TC program where the FAA determines that a MIDO inspector, rather than an agreed to designated inspection representative, should perform a particular conformity inspection. In these situations the applicant should be informed of the purpose, e.g., designee supervision, special process review, etc.
- **g.** If the designee determines unsatisfactory findings, the DER should be contacted as early as possible. Disposition of unsatisfactory findings will be resolved between the ACO and the DER in accordance with procedures authorized in the conformity plan. The ACO and MIDO should periodically review designated inspection representative unsatisfactory findings and DER dispositions of those findings.

Page 4 Par 6

9/25/98 N 8110.76

**h.** When all unsatisfactory findings are closed, the conformity paperwork is then forwarded to the appropriate office (the designee's MIDO/MISO, ACO, or DER coordinator) as defined in the conformity plan. The paperwork is then sent to the organization responsible for tracking FAA Form 8120-10 to ensure tracking number closure.

#### 7. NON-LOCAL CONFORMITY REQUEST.

- **a.** The following procedure is used when the conformity inspection is to be performed outside the managing MIDO's geographic area. The managing MIDO may authorize the designated inspection representative to perform conformity inspections in another geographic area on a trip-by-trip basis or for a specific period of time, as defined in Order 8130.28, Airworthiness Designee Management Program.
- **b.** The DER coordinator or ACO, depending on who performed the Form 8120-10 final review, sends it to the managing MIDO within two business days of final review. The DER coordinator or ACO simultaneously notifies the designated inspection representative to submit FAA Form 8130-13, Designee Geographic Expansion Authorization, to the managing MIDO for approval.
- **c.** The managing MIDO coordinates with the geographic MIDO where the inspection will be performed and, if authorized by the geographic MIDO, sends Form 8120-10 and Form 8130-13 to the designated inspection representative within four business days. The managing MIDO also forwards a copy of Form 8130-13 to the geographic MIDO where the inspection will be performed. The designated inspection representative is then authorized for travel to the other geographic area to perform the conformity inspection.

NOTE: Any designated inspection representative planning to perform a conformity inspection in another geographic area must comply with the requirements in Order 8130.28 PRIOR to traveling to the other geographic area.

**d.** After satisfactory completion of the conformity inspection, the designated inspection representative sends the complete conformity package to the managing MIDO's manufacturing specialist or MIDO/MISO PI for review, who then forwards the package to the appropriate office (the ACO or DER coordinator) as defined in the conformity plan. The paperwork is then sent to the organization responsible for tracking Form 8120-10 to ensure tracking number closure.

/S/ James Jones

James Jones Manager, Aircraft Engineering Division

Par 6 Page 5

## APPENDIX 1. DER TO DESIGNATED INSPECTION REPRESENTATIVE NOTIFICATION PROCESS

